

# The Trilemma of Agricultural Development and Food Security in Sub-Saharan Africa

RAJAONARISON, Haja Michel\*

## Abstract

*This paper investigates and discusses the relations between Global, National and Household Food Security and its implication on agricultural development policies in Sub-Saharan Africa. It seeks to understand whether such goals are converging towards the same direction or diverging – taking into consideration the ideological debates on the topic. It is argues that the three goals constitute a “Trilemma” which consequently affect the ultimate goal of combating hunger and poverty in the region.*

## Keywords:

Global, National, Household, Food Security, Agricultural policy, Sub-Saharan Africa

## I. INTRODUCTION

Since the price spike of the major grain commodities in 2008, Global Food Security has become an international issue. Such failure of the global food system has engendered new policy challenges which on the one hand, will have to take into consideration a complex environmental condition and a sustainable use of the scarce resources, and on the other hand should encompass with an increase of food production, poverty reduction and social justice (Godfray *et al.* 2010; Rosin, Stock & Campbell, 2013).

This turnaround also led to various responses all aiming at the same goal: 'ensuring food security', particularly from the international institutions such as the United Nations (UN), the G20 with the *Global Agriculture and Food Security Program* (GAFSP in 2010), the G8 with the *New Alliance for Food Security and Nutrition* (hereafter *New Alliance* in 2012), the *Comprehensive Africa Agriculture Development Programme* (CAADP, part of the Maputo Declaration in 2003 recently supported by the Malabo Declaration in 2014) – to name a few.

Three main patterns of policy goal therefore emerged from this turnaround namely: Global, National and Household Food Security. Pinstrup-Andersen (2009) explained that Global and National Food Security are focused on the supply side of the food equation, often related to the availability of food. Global Food Security therefore encompasses with the accessibility of food within the international markets, while National Food Security embraces the existence of enough production to meet the local food demand. Household Food Security, as suggested by Pinstrup-Andersen, is an '*Anthrometric measure*' that deals with daily food intakes of an individual.

Such multitude of responses matters for two main reasons: first, the three multifaceted goals: Global, National, and Household Food Security are influencing and dragging agricultural development policies in Sub-Saharan Africa (hereafter SSA). Second, if not properly conducted, the effect of the failures would have a tremendous impact on the region insofar 1.3 billion out of the 2 billion additional people that need to be fed by the middle of the century will be hailing from an African country.

The purpose of this paper is to investigate and discuss the relations between the Global, National and Household Food Security and their implications on agricultural development policies in the region. It seeks to

understand whether such goals are converging towards the same direction or diverging heterogeneously. The paper argues that the way these three goals are arranged today constitute a Trilemma which consequently, would have a significant impact on the ultimate goal of combating hunger and eradicating poverty in the region for the coming years.

Political Economy is used as a main methodological approach. In this sense, '*Political Economy*' should be understood here as suggested by Peet and Thrift (2001, p.2): '*a whole range of perspectives which differ from one another and yet share common concerns and similar viewpoints*'. In light with this organisational framework, the paper presents different cases that embrace each dimension of food security and discusses the following elements: market-security-poverty and ideological perspectives.

The paper is organised as follows: Section II presents the analytical framework and the scope of this study. Section III presents the main arguments of this paper on the existing trilemma between the three goals. Section IV presents discussions on the implications of the interactions of each food security goals. Section V concludes the paper.

## II. ANALYTICAL FRAMEWORK AND SCOPE OF THE ANALYSIS

The Political Economy of agriculture and food security in the context of African countries is influenced by different driving forces and interactions between international institutions, governments and local population that animate policy making. Accordingly, this section will present the three patterns of the Food Security within the scope of this analysis. Second, it highlights its linkages with agricultural development. Third, it briefly presents the cases discussed in the paper.

### 1. *Food Security in a broad sense and its three patterns*

To begin with, two broad definitions of 'Food Security' which grasp the present analysis will be retained in this paper:

*"Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for a healthy and active life."* World Food Summit in 1996 definition cited in Pinstrup-Andersen (2009).

*"A household is considered food secure if it has the ability to acquire the food needed by its members to be food secure. A distinction is*

*frequently made between transitory and permanent food insecurity, where the former describes periodic food insecurity as for example seasonal food insecurity, while the latter describes a long-term lack of access to sufficient food.*" Pinstруп-Andersen (2009).

As these two definitions are too broad, for simplicity, three themes will be explored here to guide the present analysis: *availability, affordability and sustainability*.

**Food Availability** is the first element of food security closely linked to agricultural development. Availability embraces the physical existence of the food – at any time and any places. Hence, availability depends enormously on the proper functioning of all the food chain process from the production, transportation, storage to the marketing.

**Food Affordability** is the second element that comes after the “*availability*” condition. Available food may not be always reasonably cheap enough for the people in low-income countries where major share of the income is spent on food. Income matters in food security, particularly if the country is a net food importer. Although SSA is classified as an agricultural-based region (see. World Bank, 2007), most of its countries have been net food importers since the 80s.

**Sustainability** is closely related to the two previous elements, particularly when they are fulfilled over the long run. In a normal condition, the ‘*access*’ condition at the national level could be fulfilled if a given country can manage properly its own food system from the farm to the final consumers. Moreover, this condition could also be satisfied at the household level if the individual in question has the adequate financial resources to purchase food at the market price over the long run. When a country becomes food secure, the surplus it generates also contributes to the Global Food Security.

## **2. The three patterns of Food security and their approaches: market, security and pro-poor**

To fulfil the three conditions mentioned above, three approaches are today dominating the policy making.

**Global Food Security through the market approach** - The first pattern of food security is located at the global level and aims at stabilizing the supply within the international markets. This approach takes into consideration the fact that international trade mechanisms are the most

effective tools to achieve food security at all level. Therefore, net food surplus countries can trade with the net food importing ones, which in turn would achieve national and household food security. This approach lays on the argument that international market would provide higher quality food with lower prices. This pattern is supposed to transcend through the global, national and then household level. Advocate of this approach are mainly the International institutions and Transnational Corporations (TNCs).

***National Food Security by achieving Self-sufficiency (security approach)*** – Four categories of countries fall under this context: *type A* endowed with physical and financial resources; *type B* with physical but poor financial resources; *type C* with no physical resources but rich in financial means; and finally, those who neither have physical nor financial resources *type D*. Although the level of security differs significantly among the four categories, policy options can be casted to one or the combination of the followings: increase of productivity both in quantity and quality, outsourcing via the use of foreign direct investment (FDI) or bilateral agreements, trade and food aid. Two major narratives of food security arise from this classification: *type B* and *D*, commonly SSA countries – in quest of self-sufficiency and *type A* and *C* motivated by resource-seeking behaviour for the countries in the Gulf, China, South Korea and Japan.

***Household Food Security – Pro-poor approach*** – deals with the smallholders or those who are engaged directly in the agricultural activities. In developing countries, a great part of the production is consumed by the farmers themselves. Advocates of household based approach are a group of school of thought regrouping agrarian populists, Marxists, anarchists, environmentalists and feminists (see. Borras *et al.*, 2008, p.109).

### ***3. Relations between food security and agricultural development***

Based on different estimates and scenarios, the world population will reach 9 billion people by 2050 (FAO, 2009). This alteration coupled with the pervasive effects of climate change, the economic uncertainty, the global energy policy and the transformation in some emerging countries would therefore have a considerable impact on the global production and consumption in a general way. The report concluded that to feed the world in 2050, there is a need to increase food production by 70 percent which implies a need for annual net investments of about US\$ 83 billion (FAO, 2009). Besides, to achieve this target, Schmidhuber, Bruinsma, and Boede-

ker (2009) estimated an indispensable cumulative investment of approximately US\$ 9.2 trillion (in 2009 dollars) over the period of 2007-2050. Moreover, Msangi, Tokgoz, Batka, and Rosegrant (2009) weighed up the amount of required investments to mitigate the impacts of climate change: US\$ 392 billion for developing countries of which US\$ 171 billion in Sub-Saharan Africa, US\$ 78 billion in South Asia, and US\$ 68 billion in Latin America. With regards to the climate effects, according to Ramasamy (2011), four dimensions would be mainly affected: the availability of food from domestic production and imports, access to resources to produce or buy food, the stability of food supply, both ecological and macro-economic, the use of food, including consumer preferences and safety of food and water.

Accordingly, agricultural development can improve food security condition through its linkages. The World Bank (2007) highlighted that: agriculture contributes to development as an *economic activity*, as a *livelihood* and as a *provider of environmental services*. Such contributions differ among the three rural world defined by the Bank (Agricultural-based, transforming and Urbanized countries), but more importantly, the report emphasized that agriculture is a major source of growth in the region like SSA which homes about 417 million of rural population (World Bank, 2007). Furthermore, the results of empirical studies over the last decades indicate that on average growth from agriculture is at least twice as effective in poverty reduction compared to other sectors of the economy (Dethier & Effenberger, 2012; Diao *et al.*, 2010; De Janvry & Sadoulet, 2010; Gollin *et al.*, 2002). Direct Linkages or the market linkages originate from early literature by Lewis (1954) which put emphasis on the reallocation of the less productive factors to the more productive ones. Other linkages from Johnston and Mellor (1961) puts forth the role that agriculture can plays in providing food to the local industries, foreign earnings that enable to purchase capital goods to enhance productivity. Indirect linkages stem from Timmer (1995) who elaborated that agricultural development also makes it possible for developing countries to support food security by improving the production of higher quality and more nutritious food.

#### ***4. Methods, cases highlights and geographical definition***

This paper critically analyses the three approaches namely: market, security and pro-poor approaches and then look at the ideological debates that

might influence policies. It draws its arguments from historical narratives over several case-highlights.

The view of SSA is here approached from a broad perspective based on the similar characteristics that the countries in the region share with respect to challenge of improving food security.

### **III. FOOD SECURITY TRILEMMA: THE RELATIONS AND ITS EXTENT**

#### ***1. The market approach and the differences of mechanisms***

'Market' is one of the institutions that dominate modern society and the organisation of the economy. Although there are several forms of markets, this paper focuses on the domestic and international ones. As mentioned earlier, the main challenge of global food security is to ensure the availability of the supply at the international level at an affordable price so that all net food importing countries would be able to enjoy the benefit of trade with more choices and good quality. However, international incentives are mainly signalling the TNCs which consequently adopted a resource-seeking behaviour by integrating and creating a monopoly within the global food system. Besides, the way how food is exchanged within the international markets gave room to speculations and made the grain market more volatile.

Linking the smallholders to the markets and mainly to the international markets is one of the strategies frequently advocated in the agricultural development policies of the recent year, and this through the value chain approach. Nonetheless, often, domestic markets do not exist or do not operate properly. Hence, to correct such gap, during the last fifteen years, development institutions and scholars have attempted to address the issue through the concept of Market-Based Approaches (MBAs). Accordingly, with the increasing demand for food, the idea was taken up in the G8 *New Alliance* project through the 'Public-Private-Partnership' (PPPs) and the 'value chains', in order to establish linkages with the international market. PPP refers to a joint government, aid agency and private sector initiative to address a special issue in economic development as described by Yescombe (2007, p.2). In agriculture, such approach takes place through three steps: 1) the development of the private supply chain; 2) the development of the value chain; and 3) transforming traditional industries (Heierli, 2008).



The development of supply chain seeks to create products or services that directly address the needs of the poor. The *New Alliance* is promoting special packages such as seeds, irrigation, agricultural machinery, information technology and risk management that address these specific needs. As an example, the leading agri-business corporation Syngenta has invested in a project known as “Seeds2B” that seeks to develop a regulated seeds system in 20 African countries. Also, as part of its expansion, it announced the acquisition of two leading seeds developers in Zambia: MRI Seed Zambia Ltd and MRI Agro Ltd (Syngenta, 2013, July). In the development of value chains, the *New Alliance* underscores the importance of public-private partnership which aims to link small farmers to the market. To this extent, the MBAs is believed to contribute extensively to the improvement of rural livelihood and enhance food security as agricultural products can be produced on a large scale, with higher quality and at a lower cost replicating the Lewis, Johnston-Mellor, and Timmer linkages discussed in the previous section.

The MBAs approach nevertheless leaves many questions, particularly regarding the linkages between poverty reduction and food security. Recalling the importance of structural change in the goal pursued by SSA countries, emergence of the modern sector plays an important role in the process. Yet, although the initiative is quite recent, so far, its effect on the 10 African countries part of the *New Alliance* appears to be disproportionate taking into consideration the 220 companies and the US\$10 billion investment portfolio committed to this end (Ford, 2014). According to the article published by the Guardian, the US development authority claimed that the program has created 650,000 jobs and would have benefited 5 million smallholders across the New Alliance countries (Ford, 2014). It is however worth to mention that these 10 countries account for about 476 million people of which rural poor represents about 178 million (IFAD, 2010; Author’s calculation).

International markets are likely to be unstable as a source of cheap food due to the growing tendency to a monopolistic control of the markets coupled with the speculative practices on the new financial instruments related to grain commodities. For 2004-08 for instance, in line with the financial crisis, the price of staple crops peaked at 101.9 percent (Headey & Fan, 2008) nearly the double of its normal price and which lingered until 2012.



Indeed, TNCs seek to secure their strategic position, devise strategic choice for the future and then turn these strategies into actions (Johnson, Scholes, & Whittington, 2005, p.15-16). To materialise these actions, TNCs use vertical integration and different mode of entry such as exporting, joint venture, strategic licensing or FDI. The branded seeds market for example, reflects how the New Alliance stakeholders are materialising their strategic management. According to the ETC Group (2011), about 67 percent of the total market share were dominated by only 10 companies in 2007, of which Monsanto, DuPont and Syngenta (top three leading companies and stakeholders in the New Alliance) accounted respectively for 23, 15 and 9 percent of the proprietary seeds market, representing about \$US10,278 million. Therefore, to keep this oligopolistic position, and with the emergence of the new demand for food globally, these companies seek to control the chain of production at the upstream level giving rise to the recent massive investment in farmland in SSA.

Moreover, the mechanism, under which international market operates, particularly for the commodity markets where staple food is traded, is different from the traditional type. Unlike the latter, commodity markets use financial instruments called 'derivatives' defined by Chisholm (2004, p.1) as *'asset, whose value is derived from the value of some other asset, known as the underlying'*. Futures, Forwards, Swaps and Options are today the most used derivatives in the commodity transactions. Generally, TNCs use derivatives to hedge against various risks such as changes in interest rates, commodity prices, debts, or fluctuations of exchange rates. Monsanto for instance, indicates that a 10 percent change of commodity prices might engender a negative effect of \$57 million loss on their financial instruments (USSEC, 2012). Yet, with the spectacular progress in the financial world with an increasingly integrated and globalised financial system, derivatives, in most instances, are circulating among financial institutions as an instrument of speculations. As explained in the report of the World Development Movement (2010; 2013), due to the financial crisis of 2008, financial institutions were speculating on food commodities. In 2012, for instance, Goldman Sachs earned about US\$400 million in 2012 from speculations on food (World Development Movement, 2013).

Market-led agricultural development and food security therefore still show a large difference in terms of market mechanism which does not bridge the Local, Global and then National markets to capture the linkag-

es to poverty reduction and food security issues.

## **2. *Security approach: Human versus traditional security***

National Food Security is one of the most sustainable goals pursued by all countries in the world. This aspect of food security is mainly focused on the improvement of the domestic conditions by making food accessible at an affordable price. Global food security therefore would be achieved when all the countries would be able to secure their own food. But this also creates a conflicting situation among the four types of countries cited above. With the recent development context the dimension of security also saw a slight drift not only within the SSA countries but for the other resource poor but financially rich economies. The interactions between human security and traditional security will therefore be used as a tool of analysis in this section.

The concept of human security and traditional security are entangled in a complex relations guided by different interests and motivated by different purposes. At the level of the SSA countries, human security prevails over the national security, owing to the fact that reducing poverty is likely to enhance food security and to this extent provides more stability at the national level. Since the early 90s, vast arrays of literatures were burgeoning dealing with the issue of '*human security*', particularly the benchmark document of the United Nations on the Human Development (UNDP, 1994). The UNDP key documents emphasise that Human security is focused on a concept called people-based approach. Clark (2006) described other features of human security which could be: local, national or global issue, which components are interdependent, and which solutions are often focused on earlier preventions. In line with such principle, all initiatives related to human security are seeking to address '*conditions that menace survival, the continuation of daily life and dignity of human beings*' (UNESCO cited in Martin & Owen, 2010).

Besides, SSA countries will have to face in the near future the changing dynamism within its own environment which includes the rising population (2.4 billion by 2050), and the structural changes driven by the thriving economic performances.

Yet, for the other countries, traditional security is leading over the human security due to the differences in terms of magnitude and exposure to various shocks such as price spike or supply disruption. As part of the

global governance, Public-Private-Partnership approach influenced policies since 2008. Nevertheless, these actions were not free of interests. Other economies such as China, India, Japan, Korea and countries in Gulf States under the *type C* are also facing uncertain and inherent risk of food insecurity today (Daniel, 2011, p.27), which in turn gave rise to land and water grabbing alongside with the form of appropriation are discussed in depth by Allan (2013). These resource-seeking or *type A* countries are supporting their multinationals to expand their activities overseas and *type C* countries are scrambling for land and business opportunities to secure stable food supply for the future. An enormous discrepancy exists between within and across the international initiatives. Countries part of the G8 are independently implementing their own programs as so did the countries in the Gulf and the countries like China, and India.

Hence, as countries are pursuing a security-led policies (human and national), the two goals driven by the self-centred policies gives rise to a conflicting interests among the SSA and other countries, under such situation, the pursuit of National Food Security for rich countries could affect the National Food security in the SSA to the extent of household and Global food insecurity.

### **3. Pro-poor approach**

By the 90s, a new concept has emerged with an idea centred on the poor, more precisely, the idea of 'pro-poor growth'. Nallari and Griffith (2011, p.70) explains that the pro-poor growth is the "*growth that increases the income of the poor*". The two authors added more technical explanations as a result of literature studies, and retained two major definitions:

*First, focuses on "whether poverty falls in response to growth by more than it would have if all incomes had grown at the same rate". The second focuses on "whether economic growth benefits poor people in absolute terms, as reflected by changes in an appropriate measure of poverty"* (Nallari & Griffith, 2011, p.70).

A pro-poor agricultural growth is concentrated on the development of small and medium-sized farms. A thematic issue on Pro-poor Growth for agriculture conducted by the OECD (2006) explains that the increase of the incomes of the poor stimulates the demand for consumer goods and services which in turn boosts the economy and produces a positive effect on poverty reduction. Household food security is expected to transcend

through the national and global level.

The pro-poor growth in the agricultural sector focuses on the transformation of the economy and rural diversification (Timmer, 2005). Timmer explains that this process follows two steps: first, diversifications marked by a shift from the staple grains production to high-value commodities, second, a step that links and shift the base of the economic growth from agriculture to the modern sectors. This however, depends on population density and the quality of human capital.

Rural diversification implies the reallocation of production resources such as land which remains a major issue in African agriculture. Indeed, producing high-valued commodities requires an adoption of new techniques of cultivation and technology upgrading if one wants to improve land productivity while meeting the demand in cash crops. The size of land however matters as the average holding in SSA is less than 2 hectares according to the World Census of Agriculture (2010). Hence, two inherent risks are impending on the linkages between pro-poor approaches; market/security, which are related to land issues. The first risk is about the decline in production of grains and the second is related to the potential risks smallholders might incur vis-à-vis the size of their activities. As stated earlier, smallholder farming type contributes directly to Household food security as the farm products are partly consumed in the process however, if smallholder farmers choose diversification, this implies that rural household income would depend on the marketing of high-value commodities, which in turns, depends on the expansion of the urban demand or the existence of exporting opportunities which often requires some degree of certifications. In both cases, risk of being food insecure and loss of income are likely plausible negative effect – given the size of the smallholder's activities and the degree of exposure of the farmers to diverse types of risk such as the effect of climate change. In addition, as most of the countries in SSA are now food-imports dependent, decline in grain production might have huge effect on the food bill if the exchange value of the high-value commodity does not offset the food imports.

With regards to the urban migration and income that have close linkages to the agricultural growth, according to the UN-DESA (2014), SSA is urbanising at a rate of 1.1 percent per annum which makes it one of the fastest urbanising continent in the world alongside with Asia. In addition, an early study of the AfDB (2012) highlighted that in 2010, the proportion

of urban population accounted 36 percent and is projected to reach 50 to 60 percent, respectively for 2030 and 2050. Nonetheless, the AfDB studies also mentioned the fact that most of the migrants lack of education and often end up in the informal sector which accounts for 93 percent of the urban employment in the continent. Due to this fact, migrant's income tends to be low and irregular. Besides, with respect to emergence of modern sectors, based on the ACET (2013) studies, the African industrialisation rate in 2010 was lower compared to its level in the 1980s.

Given the condition of agriculture and food security in SSA, theoretical approach based on Poverty-led initiative still show some gap in terms of theoretical concepts to capture the linkages with respect to markets and security and does not embrace transitions through national and global food security.

## IV. DISCUSSIONS

### *1. Food availability: the limits of interventions of SSA countries*

According to the FAO (2002), today, there is enough food to feed the global population considering the fact that the world produces more food, 17 percent higher compared to its level 30 years ago despite the increase of the population by 70 percent. According to this agency, the current production could meet the dietary intake of 2,720 kcal per day per person for the entire population in the world.

However, even if this statistics seems to be promising, it does not reflect the conditions at the regional level, particularly the region of SSA. The FAO 2013 annual report on the State of Food Insecurity (FAO, 2013) shows that the area recorded a high prevalence of malnourished with a proportion of one to four people of the total population. The report emphasised that such occurrence is mainly due to social, political and institutional conflict coupled with a precarious condition of the soil and physical environment which do not enable to conduct any sustainable agricultural activities.

Political and Social instability is for instance one of the major barriers to stable agricultural development as agriculture requires a considerable time to be sustained, from sowing to the harvest period. Increase in food price leads to national insecurity. Fluctuation within the international markets of 2008-2011, strongly affected the capacity of net food importing

poor countries to smoothen the price shock on their domestic markets, causing waves of violent protests and serious impact on the economy. A report released by the World Bank in May 2014 for instance, described that 51 food riots against hunger occurred during the period 2007-2014. The research categorises two types of food riots based on a database build on event reports on search engines and specialised sites. The type 1 of food riots as describes by the reports embraces “movement motivated by food price inflation and generally directed toward the government and other public authorities”. The type 2 encompasses with “riots usually arise in response to severe shortages of food supply” (World Bank, 2014).

In addition to the social and political unrests, most of the African countries have failed to strengthen public policies intended to promote agriculture. The failure to realise the Maputo Declaration of 2003 demonstrates a clear standing with respect to the initiative to invest in the sector. The declaration aimed at increasing the public expenditure to agriculture up to 10 percent of the GDP and an annual agricultural growth of 6 percent by 2008 (NEPAD, 2003). According to the Regional Strategic Analysis and Knowledge Support System (ReSAKSS, November, 2013), the overall expenditure of African governments to agriculture saw a considerable increase, from \$US0.39 billion in 2003 to \$US0.66 billion in 2010. Yet, on the overall, only 13 countries out of the 54 members of the African Union, managed to reach this target.

Since 2012, the Economist Intelligence Unit compiled data and scores from 0-100 (less available to totally available) relative to the Global Food Security. One of its indicators is ‘availability’. According to the EIU methodology, Food availability item measures *‘the sufficiency of the national food supply, the risk of supply disruption, national capacity to disseminate food and research efforts to expand agricultural output’*. The assessment is built on comprehensive indicators: sufficiency of supply, public expenditure on agricultural R&D, agricultural infrastructure, volatility of agricultural production, political instability, corruption, urban absorption capacity, and food loss. The item ‘availability’ illustrates that the 28 countries of SSA subject of the study, scored on average 37.7 out of 100.

## **2. Food Affordability**

Dependency on foreign markets makes SSA countries vulnerable to price volatility and as a consequence, governments to avoid any escalating



shocks must allocate significant subsidies to smooth social and political risks. But this cannot be always sustained, as the capacity of governments to manage their risk portfolio could be overwhelmed and end up in escalating tension as it was the case in 2007-08.

Similar to the availability indicator, the SSA region is also scoring low, 27 out of 100 with respect to Food affordability (EIU, 2014). The EUI methodology indicated that this item measures 'the ability of consumers to buy food, their vulnerability to price shocks and the presence of programs and policies to support clients when shocks occur', and consider the following indicators: *Consumption of food as a share of household expenditure, proportion of population below the poverty line, GDP per capita, agricultural import tariffs, access to finance for farmers and the presence safety net programs.*

### ***3. Ideological debates and the influences on policy making***

As the debate on the contemporary agricultural development policy is diverse, and is interpreted through different perspectives, highlighting discussions about ideologies and their attributes are also an essential step to understand their linkages to policy making. In the first instance, epistemologically, ideology is defined as the study of ideas. Other definition in the dictionary describing it as: '*a system of general ideas constituting a body of philosophical and political doctrine based on individual or collective behaviour*'. Ball et al., (2009, p. 4-5) put it in a simple way, conceptualizing it as a 'set of ideas that attempts to link thought to actions'.

Ideology, more precisely, performs four functions: explanatory, evaluative, indicative and programmatic (Ball, Dagger, & O'Neil, 2014, p.5-6). First, it gives explanations on why economic, political and social conditions as they are, especially during the time of crisis. Its second function is to provide a standard and norm that allow people to evaluate and judge economic, political and social conditions and therefore, distinguish things from what is right or wrong. Its third attribute is to give a sense of orientation and identity, and finally, it consists of a political agenda which tells about what to do and how to do it, and translated into a prescriptive function with comprehensive economic, political and social actions (Ball, Dagger, & O'Neil, 2014, p.5-6).



***a. Neoliberal-Corporate agriculture: large-scale approach and globalisation***

Today, there is an amalgam of literatures that deals with Neoliberalism explaining that this ideology is a set of policy that put particular focus on economic liberalisation, privatization, free trade, deregulation, market liberalisation, reduction of government interventions in the economy to give room for the private sector. The neoliberal explains that poverty reduction is best achieved through the 'trickle-down' economics, which is a policy focused on the private sector. To this extent continuous productivity will therefore led to growth and will in turn have an effect on poverty (Harvey, 2005; Jilberto, 2004; Stiglitz, 2012). As a political agenda, Steger and Roy (2010) illustrate the *Deregulation-Liberalization-Privatisation formula*.

Therefore, if the objective is to raise agricultural productivity, for the proponent of the neoliberal / corporatist agricultural development, as explained by Bunting (2010), the use of biotechnology, massive investment in irrigation and mechanization is the way forward to address the African issue.

In a large sense, food security is falling under the narratives of globalisation and poverty. Indeed, the first target of the Millennium Development Goals, adopted by the country member of the United Nations in 2000, is stressing on the importance of combating chronic poverty and hunger which in turn, falls under the thematic issues addressed by various international institutions such as the FAO, the World Bank, International Monetary Fund (IMF) or World Trade Organisation (WTO). To this extent, topic such as rural development, sound macroeconomic policy management, land reform or trade are closely related to the theme of poverty reduction. Therefore, any changes initiated within these organisations are likely to influence global food security policy. Similarly, TNCs also can use their influence to change public policy to serve their interest.

Recent changes in policy by various International organisations are sending signals to a particular group of interests, for the most part, the giant corporations that are dominating the world food system. As a global response to the price spike of foodstuff in 2008, in September 2009, the G20 created a special platform GAFSP a special fund that aims to improve the income and food security in low-income countries through the increase of agricultural productivity. The program consists of two components: the

public one, led by a steering committee comprising major international institutions such as the World Bank, the Food and Agriculture Organisation (FAO), civil society, and the representative of the Secretary General of the United Nations. The second component is a private one, led by the private arm of the World Bank Group: International Finance Corporation (IFC). This private window aims to provide funding to increase the commercial potential of the agri-business and SMEs by bridging the local, national and international value chain. With this regards, the IFC's program focuses on credit to smallholder to enable increase productivity, support to companies to develop technologies related to agriculture, and finally, investment and support in the riskier sector which cannot attract investment.

In May 2012, the G8 held a meeting at Camp David, where discussions on quite usual agenda such as the global economy, climate change or security issues took place. However, what marked this summit was the fact that specific measures were adopted to support the African continent with regards to food security and nutrition. The initiative called 'New Alliance for Food security and Nutrition' which seeks to involve the private sector by mobilising private capital, scaling up technology and reducing risk that the most vulnerable people may incur.

In these three historical facts, regardless of the institutions where the initiative to support agriculture emanate, an important keyword is repeated several times namely: 'the private sector'. In this scheme, therefore, stands a set of arguments that promotes the idea that poverty reduction and food security could be achieved when addressed with the proper measures in which the private sector can do enormously.

As core competences, the neoliberal-corporatist agricultural development and food security approach is structured on interrelated segments namely: financial, technological, distribution, information and risk (Rajaonarison, 2014). Financial segment plays a pivotal role to get agriculture moving in SSA and a remedy to the underinvestment in the sector. Banks and private institutions are now at the forefront of this segment, especially for the case of IFC and Rabobank. TNCs also possess innovative technologies to meet the challenge of agriculture such as: genetically modified seeds, farm equipment, machinery, fertilizers, pesticides, and irrigation systems. Beside, agro-industry and major retailing firms also have strong distribution network implanted in the various targeted countries. And with the recent development in the mobile industries in SSA, ICT can now

be used to disseminate information effectively. Finally, security of the investments can be achieved in two ways through the risk and information segment in which the IFC and insurance company such as Swiss RE are playing fundamental role.

Yet, such kind of approach is confronted to some obstacles. Internal and external political barriers are the most challenging issues to implement the neoliberal agenda. Internal political obstacles can be reflected by the fragility of the political institutions and the lack of capacity of government to smooth social unrest with respect to land use management and the policies it embraces. In many instances, large scale type of farming involves the use of a huge surface of cultivated area which would mean an appropriation of the smallholders land described by the peasant movement as 'land grabbing'. The main policy challenge to face such issue should therefore be addressed in the structural transformation strategies. External political obstacle could result from the altercations between different actors that privilege the power of a market-oriented food security. Indeed, countries like China and India are now playing a major role in global governance alongside with their peers within the BRICS forum. These latter are today seeking to strengthen their relations with African countries through the South-South cooperation and offer alternatives to carry out the African agricultural development. However, as these countries cited earlier are pursuing different objectives, their actions could be an element of discord with respect to policy outcomes.

Within the coming years, SSA countries could then expect more supports from the international public institutions with regards to the development of infrastructures, irrigation facilities on the one hand and a more integrated rural development project in which TNCs could intervene through the use of improved seeds, fertiliser, pesticides and various agricultural equipment on the over hand. Likewise, a dynamic lobby to deregulate the agricultural sector and to promote free trade is likely to influence future policies in SSA particularly from the community of donors on their policy recommendations and programs. In addition, a vast land titling program to secure private land property is likely to occur as a stage in the appropriation to create in a second stage a land market where international investors can buy land rights.

### ***b. The nature of Movements : small-scale approach***

Neoliberalism and the corporate agro-industry political agenda face major criticism from the 'agrarian movements' led by transnational activist. Unlike the neoliberal/corporatist ideology influenced by the discipline of economics, the agrarian movements are rather influenced by the disciplines of sociology and anthropology whose ideas are carried out through 'movement'.

'Movement' is resulting from the actions and works of people who share the same beliefs and cause.

The Peasant or Agrarian Movement explains that neoliberalism has completely transformed the dynamics of agricultural production and gave rise to a wide disparity between the North–South Relations. In addition, it stresses on the fact that globalisation and the neoliberal political agenda have undermined rural agrarian society through restructuring that privilege the private sector represented by a minority of powerful multinationals, agro-industry and agribusinesses – which actions makes the poor poorer Borras *et al.* (2008, p.76).

As an alternative political agenda, the agrarian movements are advocating the idea of 'food sovereignty' defined by the Via Campesina as:

*"people's right to healthy and culturally appropriate food produced through ecologically sound and sustainable methods and their right to define their own food and agriculture systems"* (Holt-Giménez, 2009).

Holt-Giménez added that food sovereignty embraces higher targets than the food security: the right to have enough food, the freedom of the peasants to have a democratic control over their food system. Food sovereignty stands against all forms of idea that seeks to speculate or to make profits or simply, the '*commodification*' of food. In this scenario, the control of the food system should always be under the control of those who are at the basis of the pyramid and exclude market approach, particularly the one that bypass the circuit of local, regional and national level. Thus, it puts more emphasis on people, on those who are producing the food namely, the local farmers, it also seeks to build knowledge and skills at the local level and more importantly, it promote agro-ecology to preserve the environment.

## V. CONCLUSION

This paper discussed the relationship between food security at the international, national and household level and tried to analyze whether these three elements are moving in the same direction or in different path. The arguments and cases presented here show that the three dimensions of food security carry many significant differences among within and across the three goals: market, security and poverty making it a Trilemma. At the Global level, arguments mainly concern the discrepancy on the tendency of the market approach to create more instability due to the strategic management pursued by its main actors the TNCs and the speculation practices made possible by an advanced market mechanisms. At the National level driven by security, discussions are related to the human versus national interests' conundrum. Last, household food security or pro-poor approach presented complex conditions to really capture food security at a broad sense.

Furthermore, the capacity of SSA countries to ensure availability and affordability are still weak. This weakness is giving more room for the market approach food security to influence agricultural development policies. To this extent ideological debates is also playing a pivotal role on how policies should be carried out, and given the conditions in African agriculture the neoliberal/corporatist is leading the way.

## REFERENCES

- Ball, T., Dagger, R., & O'Neil, D. (2014). *Political ideologies and the democratic ideal*. (Ninth ed.) Boston: Pearson.
- Borras, S. M. (2008). *Transnational agrarian movements confronting globalization*. Malden, MA; Oxford: Wiley-Blackwell.
- Chisholm, A. (2004). *Derivatives demystified : a step-by-step guide to forwards, futures, swaps and options*. Chichester; Hoboken, NJ: John Wiley & Sons.
- Clark, D. (Ed.). (2006). *The Elgar companion to development studies*. Edward Elgar Publishing.
- De Janvry, A. & Sadoulet, E. (2010). Agricultural Growth and Poverty Reduction: Additional Evidence. *The World Bank Research Observer*, 25, 1-20.
- Dethier, J. J. & Effenberger, A. (2012). Agriculture and development: a brief review of the literature. *Economic Systems*, 36, 175-205.
- Diao, X. (2007). The role of agriculture in development: Implications for Sub-Saharan

- Africa. Washington, D.C.: International Food Policy Research Institute.
- ETC Group (2011). *Who Will Control the Green Economy?* Ottawa: ETC Group.
- EUI (2014). The Global Food Security Index, Retrieved 1 November 2014, from <http://foodsecurityindex.eiu.com/>
- FAO (2009). World Summit on Food Security. Retrieved 6-7-2012, from [www.fao.org/wsfs/world-summit/en/](http://www.fao.org/wsfs/world-summit/en/)
- FAO. (2002). *The state of food insecurity in the world, 2002: Food insecurity: when people must live with hunger and fear starvation*. Rome: Food and Agriculture Organization of the United Nations.
- Ford, L. (2014). *US criticised over increased private sector investment in Africa*. *the Guardian*. Retrieved 1 November 2014, from <http://www.theguardian.com/global-development/2014/aug/07/us-criticised-private-sector-investment-africa>
- Godfray, H. C. J., Beddington, J. R., Crute, I. R., Haddad, L., Lawrence, D., Muir, J. F., Pretty, J., Robinson, S., & Toulmin, C. (2010). Food security: the challenge of feeding 9 billion people. *science*, 327(5967), 812-818.
- Gollin, D., Parente, S., & Rogerson, R. (2002). The role of agriculture in development. *The American Economic Review*, 92, 160-164.
- Harvey, D. (2005). *A brief history of neoliberalism*. Oxford; New York: Oxford University Press.
- Headey, D., & Fan, S. (2008). Anatomy of a crisis: the causes and consequences of surging food prices. *Agricultural Economics*, 39(s1), 375-391.
- Heierli, U. (2008). *Market approaches that work for development: How the private sector can contribute to poverty reduction*. Berne: SDC.
- Hendrix, C., & Salehyan, I. (2014). *Social Conflict in Africa Database (SCAD)*. Retrieved 1 November 2014, from <https://www.strausscenter.org/ccaps/form/4-scad-download-register.html?dataset=1&tmpl=component>
- Holt-Gimenez, E. (2009). From food crisis to food sovereignty. *Monthly Review*, 61, 142-156.
- IFAD. (2010). *Rural Poverty Portal*. Retrieved 1 November 2014, from [http://www.google.com/url?q=http://www.ruralpovertyportal.org/topic/statistics/tags/indigenous\\_peoples&sa=U&ei=XzxUVJFK5ceYBc77gsAH&ved=0CCkQFjAA&usg=AFQjCNEj6Ap9S7rLL36TU5L8XYxzcU43zQ](http://www.google.com/url?q=http://www.ruralpovertyportal.org/topic/statistics/tags/indigenous_peoples&sa=U&ei=XzxUVJFK5ceYBc77gsAH&ved=0CCkQFjAA&usg=AFQjCNEj6Ap9S7rLL36TU5L8XYxzcU43zQ)
- Jilberto, A. E. F. (2004). The Political Economy of Neoliberal Governance in Latin America. In J. Demmers, A. E. F. Jilberto, & B. Hogenboom (Eds.), *Good governance in the era of global neoliberalism : conflict and depolitisation in Latin America, Eastern Europe, Asia, and Africa*. (pp. 33-55). London; New York: Routledge.
- Johnson, G., Scholes, K., & Whittington, R. (2005). *Exploring corporate strategy : [text and cases]*. Harlow, England; New York: Financial Times Prentice Hall.
- Johnston, B. F. & Mellor, J. W. (1961). The Role of Agriculture in Economic Development. *The American Economic Review*, 51, 566-593.
- Lewis, W. A. (1954). Economic development with unlimited supplies of labour. *The manchester school*, 22, 139-191.



- Martin, M. & Owen, T. (2010). The second generation of human security: lessons from the UN and EU experience. *International Affairs*, 86, 211-224.
- Msangi, S., Tokgoz, S., Batka, M., & Rosegrant, M. (2009). Investment requirements under new demands on world agriculture: feeding the world with bioenergy and climate change. In *How to feed the World in 2050. Proceedings of a technical meeting of experts, Rome, Italy, 24-26 June 2009*. (pp. 1-18). Food and Agriculture Organization of the United Nations (FAO).
- NEPAD (2003). Retrieved 1 November 2014, from <http://www.nepad.org/system/files/caadp.pdf>
- Peet, R. & Thrift, N. (2001). *New models in geography: the political-economy perspective*. (vols. One) London: Taylor & Francis.
- Pinstrup-Andersen, P. (2009). Food security: definition and measurement. *Food security*, 1, 5-7.
- Rajaonarison, H. M. (2014). Food and Human Security in Sub-Saharan Africa. *Procedia Environmental Sciences*, 20, 377-385.
- Ramasamy, S. (2011). World Food Security: The Challenges of Climate Change and Bioenergy. In R. Lal, M. V. K. Sivakumar, S. M. A. Faiz, A. H. M. Mustafizur Rahman, & K. R. Islam (Eds.), *Climate Change and Food Security in South Asia* (pp. 183-213). Springer Netherlands.
- ReSAKSS. (2013). Regional Strategic Analysis and Knowledge Support System. Retrieved 1 November 2014, from <http://www.resakss.org/publications/7>
- Rosin, C. J., Campbell, H., & Stock, P. V. (2012). *Food systems failure: The global food crisis and the future of agriculture*. Abingdon, Oxon: Earthscan.
- Salehyan, I., Hendrix, C. S., Hamner, J., Case, C., Linebarger, C., Stull, E. et al. (2012). Social Conflict in Africa: A New Database. *International Interactions*, 38, 503-511.
- Schmidhuber, J., & Tubiello, F. N. (2007). Global food security under climate change. *Proceedings of the National Academy of Sciences*, 104(50), 19703-19708.
- Schmidhuber, J., Bruinsma, J., & Boedeker, G. (2009, June). Capital requirements for agriculture in developing countries to 2050. In *FAO Expert Meeting on "How to Feed the World in (Vol. 2050, pp. 24-26)*.
- Stiglitz, J. E. (2012). *The price of inequality : [how today's divided society endangers our future]*. New York: W.W. Norton & Co.
- Syngenta,. (2013). *Syngenta to acquire African corn seed business*. *Syngenta.com*. Retrieved 1 November 2014, from <http://www.syngenta.com/global/corporate/en/news-center/news-releases/Pages/130703.aspx>
- Syngenta. (2013). *Syngenta to acquire African corn seed business*. Retrieved 12 September 2014,
- Timmer, C. P. (1995). Getting agriculture moving: do markets provide the right signals? *Food Policy*, 20, 455-472.
- UNDP (1994). *Human Development Report 1994*. New York: Oxford University Press.
- USSEC. (2012). FORM 10-K. Retrieved 1 November 2014, from <http://www.monsanto.com/investors/documents/annual%20report/2012/2012-10k.pdf>



- World Bank (2007). *World Development Report 2008: Agriculture For Development*. Washington, D.C.: World Bank.
- World Development Movement,. (2010). *The Great Hunger Lottery - How banking speculation causes food crises*. London: World Development Movement.
- World Development Movement,. (2013). *Goldman Sachs made up to £250 million betting on food prices in 2012*. Retrieved 10 September 2014, from <http://www.wdm.org.uk/food-and-hunger/goldman-sachs-made-%C2%A3251-million-betting-food-prices-2012>
- Yescombe, E. R. (2007). *Public-private partnerships: Principles of policy and finance*. Amsterdam: Elsevier.

The editorial board accepted this article with reviews by referees on January 21, 2015.

